Serial No.: 10/583,396

Election and Preliminary Amendment

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior revisions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A camera arrangement, in particular for use in a motor vehicle, comprising

a printed circuit board with an image sensor and an objective lens carrier; and

an objective lens for projecting an image onto the image sensor;

the objective lens being connected by a connector to the objective lens carrier;

said characterized in that the connectoring means is being one or more ball

segment-shaped housing sections, said sections being operatively engaged with said which are

provided terminally of the objective lens and which are said sections being held in a cylindrical

bore of said [[the]] objective lens carrier, said [[the]] connectoring means being operative to

suitable for sliding the slide said objective lens relative to said [[the]] image sensor; and said

connector being operative to as well as pivoting it said objective lens relative to said image

sensor.

2. (Currently Amended) The camera arrangement according to claim 1, wherein the

ball segment-shaped housing section is mounted in [[and]] the cylindrical bore with a clearance

sufficient are mounted so as to be slidable and pivotable relative to said cylindrical bore each

3

other by a loose fit.

SLC-6020548-4

Serial No.: 10/583,396

Election and Preliminary Amendment

3. (Previously Presented) The camera arrangement according to claim 1, wherein the

objective lens, the printed circuit board with the image sensor and the objective lens carrier are

accommodated in a housing.

(Previously Presented) The camera arrangement according to claim 1, wherein the

ball segment-shaped section is injection molded integrally on the objective lens or glued to the

objective lens.

5. (Previously Presented) The camera arrangement according to claim 1, wherein the

objective lens carrier is made of a material which is permeable to laser radiation.

6 - 12. (Cancelled)

13. (Currently Amended) The camera arrangement of claim 1 further comprising a

controller, said controller being configured to:

introduce an objective lens into the objective lens carrier in a predetermined initial

position;

read out information from an image sensor and determine a contrast value in a

predetermined image region, determine a first weighted average of contrast values and store

storing the weighted average linked with a respective distance position in an evaluating device;

[[to]] slide the objective lens by a distance section in the direction of the image

sensor;

4 SLC-6020548-4

Serial No.: 10/583,396

Election and Preliminary Amendment

[[to]] repeat said determination of said first weighted average and said slide until the ball segment-shaped housing section reaches a predetermined end position;

[[to]] slide the objective lens into the distance position Wmax where in which the value of the stored weighted averages is maximal;

[[to]] pivot the objective lens into a predetermined first initial pivot position;

[[to]] read out the image sensor information and to determine the contrast values in the predetermined image regions, to determine a second weighted average of the contrast values and to store the second weighted average linked with the respective pivot position in an evaluating device;

[[to]] pivot the objective lens by a pivot angle in a predetermined first pivot direction;

[[to]] repeat said determination of said second weighted average and said pivot until a predetermined first end position is reached;

[[to]] pivot the objective lens into the pivot position Samax in which the value of the stored second weighted averages is maximal.

14 - 18. (Cancelled)

19. (New) A camera arrangement comprising:

an objective lens in objective lens carrier in a predetermined initial position;

a controller configured to read information from an image sensor and to determine a contrast value in a predetermined image region, and to determine a first weighted average of contrast values and to store the weighted average linked with a respective distance position in an evaluating device;

SLC-6020548-4 5

Serial No.: 10/583,396

Election and Preliminary Amendment

said objective lens being slidable in the direction of the image sensor in response

to a signal from said controller;

said controller being further configured to repeat said determining a first weighted

average step and to slide said objective lens until a housing section reaches a predetermined

sliding end position;

said controller being further configured to slide said objective lens to a distance

position W_{max} in which the value of the stored weighted averages is maximal;

said objective lens being pivotable into a predetermined first initial pivot position;

said controller being further configured to read out the image sensor information

and determine the contrast values in the predetermined image regions, and to determine a second

weighted average of the contrast values and to store the second weighted average linked with a

respective pivot position in an evaluating device;

said controller being further configured to pivot said objective lens by a pivot

angle in a predetermined first pivot direction;

said controller being further configured to repeat said determining a second

weighted average step and said pivoting step until a predetermined pivoting end position is

reached;

said controller being further configured to pivot said objective lens into a pivot

position S_{amax} in which the value of the stored second weighted averages is maximal;

said housing section being operatively engaged with the cylindrical bore.

20. (New) The camera arrangement according to claim 19, further comprising:

6

SLC-6020548-4

Serial No.: 10/583,396

Election and Preliminary Amendment

said objective lens being pivotal in a second pivot direction orthogonal to the first

pivot direction into a second initial pivot position;

said controller being further configured to read out the image sensor information

and determining a contrast value in predetermined image regions, and to determine a third

weighted average of the contrast values and to store the weighted average linked with a second

respective pivot position in the evaluating device;

said objective lens being pivotable by a second pivot angle in the direction

opposite the second pivot direction;

said controller being configured to repeat said determining a third weighted

average step and said pivoting step until a predetermined second pivot end position S_{Bend} is

reached;

said objective lens being pivotable into a pivot position $S_{\beta max}$ in which the value

of the pre-stored weighted averages is maximal.

21. (New) The camera arrangement according to claim 19, wherein the predetermined

image regions are at least the picture elements which lie on a radius $R = \frac{1}{4}$ * the width of an

image about an expected image center.

22. (New) The camera arrangement according to claim 19, wherein the contrast

values are determined by a modulation transfer function.

23. (New) The camera arrangement according to claim 19, wherein the housing

section and the cylindrical bore are connected to each other by laser welding or gluing.

SLC-6020548-4 7

Serial No.: 10/583,396

Election and Preliminary Amendment

24. (New) a camera arrangement according to claim 19, wherein the measured

contrast values are contrast values independent of each other for the color values red, green and

blue.

25. (New) The camera arrangement according to claim 19, wherein the color values

are weighted with a factor, the green contrast values being more heavily weighted than the red

contrast values and the red contrast values more heavily than the blue contrast values.

(New) The camera arrangement of claim 19 wherein said housing section is ball

segment shaped.

27. (New) A camera meeting image tolerance criteria by adjustment after

manufacture and initial assembly of components comprising:

a housing;

a planar image sensor being fixedly mounted on said housing;

a lens mounted in a lens holder, said lens defining a focal plane;

said lens holder being initially slideable relative to said housing along an axis

substantially normal to said planar image sensor such as to enable selectively varying an axial

position of said focal plane relative to said image sensor;

said lens holder being initially pivotable relative to said housing such as to enable

selectively varying an angle of said focal plane relative to said planar image sensor;

said lens holder being fixedly adhered to said housing in a user selected position

relative to said image sensor;

said user selected position being determined according to preconfigured image

control criteria and according to maximal values for said image control criteria obtainable before

SLC-6020548-4 8

Serial No.: 10/583,396

Election and Preliminary Amendment

said fixed adherence of said lens holder to said housing by adjusting said sliding and said pivoting of said lens holder relative to said housing.

- 28. (New) The camera of claim 27 wherein said criteria are a weighted average of contrast values measured at predetermined image positions.
- 29. (New) The camera of claim 27 wherein said criteria are an interpolation of weighted averages of contrast values from various image positions.
- 30. (New) The camera of claim 27 wherein said criteria are a predetermined standard deviation threshold from a maximum contrast value.
- 31. (New) The camera of claim 27 wherein said criteria are determined according to values measured within the predetermined radius of an image center.
- 32. (New) The camera of claim 27 wherein said maximum values are interiatively calculated to obtain the maximal value.